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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/614,660	07/12/2000	Darko Kirovski	MSI-570US	2152

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LEE & HAYES PLLC
421 W RIVERSIDE AVENUE SUITE 500
SPOKANE, WA 99201

EXAMINER	
REVAK, CHRISTOPHER A	

ART UNIT	PAPER NUMBER
2131	

DATE MAILED: 07/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/614,660	KIROVSKI ET AL.	
	Examiner	Art Unit	
	Christopher A. Revak	2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 January 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-33 and 47-55* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-33,47-55* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *see attached*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. The application has complied with the examiner's request to amend the abstract and it is now in compliance.

2. The applicant has amended the specification and the examiner hereby withdraws the objection.

3. As per the rejection of claims 1,3-7,9, and 11-16 under 35 USC 101, the examiner has found applicant's arguments to be non-persuasive. The applicant's argues that claims are directed towards a process and that computer software may be one way to implement the claimed process. The examiner contends that the computer software is not tangibly embodied, for example, being stored on a computer readable medium or the requirement of the implementation through use of technology such as being processed by a processor or being encoding that requires the use of technology in order to put something into computer code. The examiner maintains the rejection of the claims.

4. The examiner has found the applicant's arguments to be persuasive and the rejection of claims 28-33 under 35 USC 112 2nd paragraph is hereby withdrawn by the examiner.

5. Applicant's arguments with respect to the prior art rejection of claims 1-55 have been considered but are moot in view of the new grounds of prior art rejection.

Information Disclosure Statement

6. The information disclosure statement (IDS) submitted on March 30, 2005 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner is considering the information disclosure statement.

The examiner notes that the applicant has submitted the missing references Japanese Patent 11110913 and the reference entitled Robust audio watermarking using perceptual masking" by Swanson which has been considered by the examiner.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claims 1,3-7,9, and 11-16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claimed subject matter fails to disclose of statutory subject matter which is just software alone and of itself. The applicant is suggested to amend the claims to either incorporate the subject to be embodied on a computer readable medium or to require the implementation of the use of technology whereby in claim 2, it is recited of encoding that requires the use of technology in order to put something into computer code.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1-3,5-12,14-23,25-29,31-33, and 47-55 are rejected under 35 U.S.C. 102(e) as being anticipated by Fridrich et al, U.S. Patent 6,094,483.

As per claim 1, it is disclosed by Fridrich et al of a method for concealing an information pattern of multiple pixels (discrete values) within a digital signal. The information pattern of pixels (discrete value) is received and a chaotic map (chessboarding) is used for the pixels (discrete values) to produce the chaotic map (chessboarded) pixels (discrete values) wherein the chaotic map (chessboarded) comprises modifying (adjusting) the pixels (discrete values) of the information pattern (col. 3, lines 56-67 and col. 4, lines 1-10).

As per claim 2, it is disclosed Fridrich et al of encoding using the chaotic map of (chessboarded) pixels (discrete values) into a digital signal wherein such signal is noise is relation to the information pattern (col. 3, lines 59-62 and col. 4, lines 47-54).

As per claim 3, Fridrich et al teaches of pseudo-randomly determining whether to change each pixel (discrete value) of the information pattern, wherein such determining is based upon a pseudo-random number generator and a key (col. 3, lines 38-54 and col. 4, lines 40-42).

As per claims 5,14,25,31, and 54, it is disclosed by Fridrich et al that a chaotic map (chessboard) produces a random looking image (entropy balanced) of pixels (discrete values)(col. 3, lines 59-62 and col. 4, lines 47-54).

As per claims 6,15,26,32, and 48, Fridrich et al teaches of a chaotic map (chessboard) produces a random looking image of pixels (discrete values) wherein the pixels (discrete values) are alternated by color (absolutely chessboarded)(col. 1, lines 25-35 and col. 3, lines 59-62).

As per claim 7, Fridrich et al discloses of that the digital signal is a digital audio signal (col. 1, lines 20-23).

As per claim 8, it is disclosed by Fridrich et al of a method for concealing an information pattern of multiple pixels (discrete values) within a digital signal. The information pattern of pixels (discrete value) is received and a chaotic map (chessboarding) is used for the pixels (discrete values) to produce the chaotic map (chessboarded) pixels (discrete values) wherein the chaotic map (chessboarded) comprises modifying (adjusting) the pixels (discrete values) of the information pattern (col. 3, lines 56-67 and col. 4, lines 1-10). The teachings of Fridrich et al disclose of the use of software (col. 6, lines 4-9) and it is inherent that the software is stored on a computer readable medium having computer readable instructions that are executed by a computer since it is necessary for the processor to read and interpret the software, that is stored in memory, then to execute the software instructions to perform the desired functionality of performing the chaotic mapping (chessboarding) of pixels (discrete values).

As per claim 9, it is disclosed by Fridrich et al of a method for revealing an information pattern of multiple chaos maps (chessboarded) pixels (discrete values) within a digital signal. The chaotic map (chessboarded) pixels (discrete values) correspond to original pixels (discrete values) of the information pattern before the values were used by the chaos map (chessboard). The information pattern is received of multiple chaos maps (chessboarded) pixels (discrete values) and the chaos map is extracted (unchessboarded) the pixels (discrete values) to produce the original value of the information pattern wherein the chaos map is extracted (unchessboarded) the pixels (discrete values) comprises adjusting the pixels (discrete values) of the information pattern (col. 3, line 56 through col. 4, line 10 and col. 4, lines 25-39).

As per claim 10, it is disclosed Fridrich et al of encoding using the chaotic map of (chessboarded) pixels (discrete values) into a digital signal wherein such signal is noise is relation to the information pattern (col. 3, lines 59-62 and col. 4, lines 47-54).

As per claim 11, Fridrich et al teaches of pseudo-randomly determining whether to change each pixel (discrete value) of the information pattern, wherein such determining is based upon a pseudo-random number generator and a key (col. 3, lines 38-54 and col. 4, lines 40-42).

As per claim 12, it is disclosed by Fridrich et al that the key to extract the image from the chaotic map (unchessboarding) is the same key to generate the chaotic map (chessboarding) the pixels (discrete values) of the information pattern (col. 4, lines 40-46).

As per claim 16, Fridrich et al discloses of that the digital signal is a digital audio signal (col. 1, lines 20-23).

As per claim 17, it is disclosed by Fridrich et al of a method for revealing an information pattern of multiple chaos maps (chessboarded) pixels (discrete values) within a digital signal. The chaotic map (chessboarded) pixels (discrete values) correspond to original pixels (discrete values) of the information pattern before the values were used by the chaos map (chessboard). The information pattern is received of multiple chaos maps (chessboarded) pixels (discrete values) and the chaos map is extracted (unchessboarded) the pixels (discrete values) to produce the original value of the information pattern wherein the chaos map is extracted (unchessboarded) the pixels (discrete values) comprises adjusting the pixels (discrete values) of the information pattern (col. 3, line 56 through col. 4, line 10 and col. 4, lines 25-39). The teachings of Fridrich et al disclose of the use of software (col. 6, lines 4-9) and it is inherent that the software is stored on a computer readable medium having computer readable instructions that are executed by a computer since it is necessary for the processor to read and interpret the software, that is stored in memory, then to execute the software instructions to perform the desired functionality of performing the chaotic mapping (chessboarding) of pixels (discrete values).

As per claim 18, the teachings of Fridrich et al disclose of the use of software (col. 6, lines 4-9) and it is inherent that the software is stored on a computer readable medium having computer readable instructions that are executed by a computer since it is necessary for the processor to read and interpret the software, that is stored in

memory, then to execute the software instructions to perform the desired functionality of performing the chaotic mapping (chessboarding) of pixels (discrete values). Fridrich et al teaches of a method for concealing an information pattern of multiple pixels (discrete values) within a digital signal. The information pattern of pixels (discrete value) is received and a chaotic map (chessboarding) is used for the pixels (discrete values) to produce the chaotic map (chessboarded) pixels (discrete values) wherein the chaotic map (chessboarded) comprises modifying (adjusting) the pixels (discrete values) of the information pattern (col. 3, lines 56-67 and col. 4, lines 1-10). It is additionally recited of encoding using the chaotic map of (chessboarded) pixels (discrete values) into a digital signal wherein such signal is noise is relation to the information pattern (col. 3, lines 59-62 and col. 4, lines 47-54).

As per claim 19, the teachings of Fridrich et al disclose of the use of software (col. 6, lines 4-9) and it is inherent that the software is stored on a computer readable medium having computer readable instructions that are executed by a computer since it is necessary for the processor to read and interpret the software, that is stored in memory, then to execute the software instructions to perform the desired functionality of performing the chaotic mapping (chessboarding) of pixels (discrete values). Fridrich et al recites of a method for revealing an information pattern of multiple chaos maps (chessboarded) pixels (discrete values) within a digital signal. The chaotic map (chessboarded) pixels (discrete values) correspond to original pixels (discrete values) of the information pattern before the values were used by the chaos map (chessboard). The information pattern is received of multiple chaos maps (chessboarded) pixels

(discrete values) and the chaos map is extracted (unchessboarded) the pixels (discrete values) to produce the original value of the information pattern wherein the chaos map is extracted (unchessboarded) the pixels (discrete values) comprises adjusting the pixels (discrete values) of the information pattern (col. 3, line 56 through col. 4, line 10 and col. 4, lines 25-39). It is additionally recited of encoding using the chaotic map of (chessboarded) pixels (discrete values) into a digital signal wherein such signal is noise is relation to the information pattern (col. 3, lines 59-62 and col. 4, lines 47-54).

As per claim 20, the teachings of Fridrich et al disclose of the use of software (col. 6, lines 4-9) and it is inherent that a processor executes the software that is stored on a computer readable medium having computer readable instructions since it is necessary for the processor to read and interpret the software, that is stored in memory, then to execute the software instructions to perform the desired functionality of performing the chaotic mapping (chessboarding) of pixels (discrete values). Fridrich et al teaches of a method for concealing an information pattern of multiple pixels (discrete values) within a digital signal. The information pattern of pixels (discrete value) is received and a chaotic map (chessboarding) is used for the pixels (discrete values) to produce the chaotic map (chessboarded) pixels (discrete values) wherein the chaotic map (chessboarded) comprises modifying (differing before chessboarding) the pixels (discrete values) of the information pattern (col. 3, lines 56-67 and col. 4, lines 1-10).

As per claim 21, the teachings of Fridrich et al disclose of the use of software (col. 6, lines 4-9) and it is inherent that a processor executes the software is stored on a computer readable medium having computer readable instructions since it is necessary

for the processor to read and interpret the software, that is stored in memory, then to execute the software instructions to perform the desired functionality of performing the chaotic mapping (chessboarding) of pixels (discrete values). The chaotic map (chessboarded) pixels (discrete values) correspond to original pixels (discrete values) of the information pattern before the values were used by the chaos map (chessboard). The information pattern is received of multiple chaos maps (chessboarded) pixels (discrete values) and the chaos map is extracted (unchessboarded) the pixels (discrete values) to produce the original value of the information pattern wherein the chaos map is extracted (unchessboarded) the pixels (discrete values) comprises adjusting (differing before unchessboarding) the pixels (discrete values) of the information pattern (col. 3, line 56 through col. 4, line 10 and col. 4, lines 25-39).

As per claims 22 and 28, Fridrich et al teaches of a method for concealing an information pattern of multiple pixels (discrete values) within a digital signal. The information pattern of pixels (discrete value) is received (by a receiver) and a chaotic map (chessboarding) is used for the pixels (discrete values) to produce (by means of a chessboarder) the chaotic map (chessboarded/marked signals) pixels (discrete values/unmarked signals) wherein the chaotic map (chessboarded) comprises modifying (differing before chessboarding) the pixels (discrete values) of the information pattern (col. 3, lines 56-67 and col. 4, lines 1-10). It is additionally recited of encoding (by means of an encoder) using the chaotic map of (chessboarded) pixels (discrete values) into a digital signal (col. 3, lines 59-62 and col. 4, lines 47-54).

As per claims 23 and 29, Fridrich et al discloses of pseudo-randomly determining whether to change each pixel (discrete value) of the information pattern, wherein such determining is based upon a pseudo-random number generator and a key (col. 3, lines 38-54 and col. 4, lines 40-42). The information pattern of pixels (discrete value) is received and a chaotic map (chessboarding) is used for the pixels (discrete values) to produce the chaotic map (chessboarded) pixels (discrete values) wherein the chaotic map (chessboarded) comprises modifying (by a value adjuster) the pixels (discrete values) of the information pattern (col. 3, lines 56-67 and col. 4, lines 1-10).

As per claim 27, Fridrich et al teaches of a method for concealing an information pattern of multiple pixels (discrete values) within a digital signal. The information pattern of pixels (discrete value) is received (by a receiver) and a chaotic map (chessboarding) is used for the pixels (discrete values) to produce (by means of a chessboarder) the chaotic map (chessboarded) pixels (discrete values) wherein the chaotic map (chessboarded) comprises modifying (differing before chessboarding) the pixels (discrete values) of the information pattern (col. 3, lines 56-67 and col. 4, lines 1-10). It is additionally recited of encoding (by means of an encoder) using the chaotic map of (chessboarded) pixels (discrete values) into a digital signal (col. 3, lines 59-62 and col. 4, lines 47-54). The teachings of Fridrich et al disclose of use of a desktop computer (col. 1, lines 57-61) and it is inherent that an operating system is stored on the computer since operating systems are the core components of a computer that is software responsible for controlling the allocation and use of hardware resources.

As per claim 33, Fridrich et al discloses of that the digital (marked and unmarked) signal is a digital audio signal (col. 1, lines 20-23).

As per claim 47, it is disclosed by Fridrich et al of a method for concealing an information pattern of multiple pixels (discrete values) within a digital signal. The information pattern of pixels (discrete value) is received and a chaotic map (chessboarding) is encoded and used for the pixels (discrete values) to produce the chaotic map (chessboarded) pixels (discrete values) wherein the chaotic map (chessboarded) comprises modifying (adjusting) the pixels (discrete values) of the information pattern (col. 3, lines 56-67 and col. 4, lines 1-10,47-54).

As per claim 49, Fridrich et al discloses of that the digital signal is a digital audio signal (col. 1, lines 20-23).

As per claim 50, it is disclosed by Fridrich et al of a method for concealing an information pattern of multiple pixels (discrete values) within a digital signal. The information pattern of pixels (discrete value) is received and a chaotic map (chessboarding) is encoded and used for the pixels (discrete values) to produce the chaotic map (chessboarded) pixels (discrete values) wherein the chaotic map (chessboarded) comprises modifying (adjusting) the pixels (discrete values) of the information pattern (col. 3, lines 56-67 and col. 4, lines 1-10,47-54). The teachings of Fridrich et al disclose of the use of software (col. 6, lines 4-9) and it is inherent that the software is stored on a computer readable medium having computer readable instructions that are executed by a computer since it is necessary for the processor to read and interpret the software, that is stored in memory, then to execute the software

instructions to perform the desired functionality of performing the chaotic mapping (chessboarding) of pixels (discrete values).

As per claim 51, it is disclosed by Fridrich et al of a method for concealing an information pattern of multiple pixels (discrete values) within a digital signal. The information pattern of pixels (discrete value) is received and a chaotic map (chessboarding) is used for the pixels (discrete values) to produce the chaotic map (chessboarded) pixels (discrete values) wherein the chaotic map (chessboarded) comprises modifying (adjusting) the pixels (discrete values) of the information pattern (col. 3, lines 56-67 and col. 4, lines 1-10). Fridrich et al teaches of pseudo-randomly determining whether to change each pixel (discrete value) of the information pattern, wherein such determining is based upon a pseudo-random number generator and a key (col. 3, lines 38-54 and col. 4, lines 40-42).

As per claim 52, it is disclosed Fridrich et al of encoding using the chaotic map of (chessboarded) pixels (discrete values) into a digital signal wherein such signal is noise is relation to the information pattern (col. 3, lines 59-62 and col. 4, lines 47-54).

As per claim 54, Fridrich et al discloses of that the digital signal is a digital audio signal (col. 1, lines 20-23).

As per claim 55, it is disclosed by Fridrich et al of a method for concealing an information pattern of multiple pixels (discrete values) within a digital signal. The information pattern of pixels (discrete value) is received and a chaotic map (chessboarding) is used for the pixels (discrete values) to produce the chaotic map (chessboarded) pixels (discrete values) wherein the chaotic map (chessboarded)

comprises modifying (adjusting) the pixels (discrete values) of the information pattern (col. 3, lines 56-67 and col. 4, lines 1-10). Fridrich et al teaches of pseudo-randomly determining whether to change each pixel (discrete value) of the information pattern, wherein such determining is based upon a pseudo-random number generator and a key (col. 3, lines 38-54 and col. 4, lines 40-42). The teachings of Fridrich et al disclose of the use of software (col. 6, lines 4-9) and it is inherent that the software is stored on a computer readable medium having computer readable instructions that are executed by a computer since it is necessary for the processor to read and interpret the software, that is stored in memory, then to execute the software instructions to perform the desired functionality of performing the chaotic mapping (chessboarding) of pixels (discrete values).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. Claims 4,13,24, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fridrich et al, U.S. Patent 6,094,483 in view of Wakasu, U.S. Patent 6,259,801.

Fridrich et al discloses of pseudo-randomly determining whether to change each pixel (discrete value) of the information pattern (col. 3, lines 38-54). A chaotic map

(chessboarding) is used for the pixels (discrete values) to produce the chaotic map (chessboarded) pixels (discrete values) wherein the chaotic map (chessboarded) comprises modifying (adjusting) the pixels (discrete values) of the information pattern (col. 3, lines 56-67 and col. 4, lines 1-10). The teachings of Fridrich et al are silent in disclosing of look-up table for changing discrete values. In a substantially similar disclosure, Wakasu discloses of a watermark data insertion position (look-up) table that indicates the position and values pertaining to (chessboarded) watermark data and DCT data (consisting of discrete values) are determined (changed) based upon the row and column numbers in order to perform the DCT transformation (col. 7, lines 21-30,38-44). It would have been obvious to a person of ordinary skill in the art at the time of the invention to have used a look-up table as a means of performing DCT transformations. Wakasu recites motivation for the use of watermark data insertion position (look-up) table by disclosing that the watermark data insertion position (look-up) table indicates what kind of watermark is inserted into which blocks in an image (col. 4, line 66 through col. 5, line 7). It is obvious that the teachings of Fridrich et al would have been modifiable so that the watermark data insertion position (look-up) table indicates what kind of watermark is inserted into which blocks in an image.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Fridrich et al, U.S. Patent 6,064,738 discloses of chaotic baker maps.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher A. Revak whose telephone number is 571-272-3794. The examiner can normally be reached on Monday-Friday, 6:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher Revak
AU 2131

4/29/05

CR

April 29, 2005